The Whole Story on Sedation

The recent Ethics Rounds article, "Death After Pediatric Dental Anesthesia: An Avoidable Tragedy,"1 featuring a hypothetical case scenario of a child death attributed to sedation, is not a true representation of the sedations performed many times daily in this country safely and according to guidelines jointly supported by the American Academy of Pediatrics and the American Academy of Pediatric Dentistry (AAPD).2 The discussion is focused on caries management rather than anesthesia, as stated in the title, and also inaccurately poses an unrealistic set of choices for care of the young child with established dental pain from early childhood caries. We are concerned that the readership of Pediatrics leaves this forum with the belief that sedation for management of caries is an inherently dangerous procedure haphazardly applied by the dental community, or that silver diamine fluoride (SDF) is a panacea for dental pain attributable to severe early childhood caries.

As accurately stated by the authors, early childhood caries is epidemic and with it comes a host of potential short- and long-term consequences. Depending on the extent and severity of caries, the age and developmental status of the child, his or her cooperation, health status, and parental and dentist choices, a host of treatment options exist to manage this disease. Rarely is the choice simply a dichotomy between sedation and SDF. When a history of pain has been established associated with the condition, SDF is usually not considered, because the infection has spread and it will be ineffective. The consequences of pain for the child, who often endures weeks of it in addition to significant doses of over-the-counter pain medication, and for the often-poor parents whose caretaking routine is disrupted, are reasons to go beyond SDF.

The decision to sedate a child is seldom made lightly. The American Dental Association’s Choosing Wisely recommendations, supported by the AAPD, encourage parents to exhaust other options before choosing more advanced behavior guidance, as do the behavior guidance guidelines of the AAPD.

Perhaps the series of errors in sedation protocol described in the case scenario are meant to stimulate discussion, but a serious forum on the ethics of treatment of this epidemic with known consequences beyond the stated effect on permanent teeth would have better described the reality of the rare sedation death, which is its unpredictability. The reality of complication in even the best of circumstances is troublesome and should be the focus of resolve by those invested in child safety. In addition, the Ethics Rounds discussion fails to acknowledge the hundreds and perhaps thousands of sedations safely performed by health professionals following the American Academy of Pediatrics and/or AAPD guidelines, which allow treatment of conditions that would otherwise not occur or would be beyond the financial reach of families.

The Ethics Rounds discussion would have been better if it had been focused on the dilemma of treatment choices that are real, in circumstances such as a child with painful dental caries, developmental behavior challenges for the clinician, limited family resources, and dependency on a payer industry that has not engaged in a contemporary and epidemic-aware discussion with health professionals and child advocates. As stated by the discussants, medical and dental organizations are actively discussing the issue of sedation deaths of children and what can be done to prevent them.

The goal is no death from sedation for any child, and it is achievable. If readers leave this forum believing that SDF is an alternative for other treatment of caries as described in the case scenario or that sedation is commonly done cavalierly or ineptly, it has done a disservice to children and their families and to health professionals who take safety seriously.

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CONFLICT OF INTEREST: James D. Nickman is the president of the American Academy of Pediatric Dentistry.

REFERENCES
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Authors’ Response Sedation Safety Has Many Perspectives, and the Discussion is Ongoing

We agree that the hypothetical case is not representative of the care provided on a daily basis. Rather, it is meant to represent what happens when many gaps in safety result in an adverse event. Adverse events, although rare, are opportunities to learn and change.

Our intention was to facilitate a discussion about how these adverse events could be framed from the perspectives of dentistry, anesthesiology, and bioethics. However, the perspectives are truly from the individual authors and should not be interpreted to be representative of entire specialties.

Clearly this topic is multifactorial, spans several disciplines, and encompasses many perspectives. We appreciate the perspective from pediatric dentistry provided in your
comments and the controversial nature of claims about SDF.

As we noted in our commentary, preventive dentistry to reduce the number of children with severe caries is an important part of the solution. However, preventive dentistry and SDF have their limits. Caries etiology is highly influenced by oral health behaviors, which clinical dentistry may have limited ability to affect, particularly when some parents of patients simply do not seek care until their disease is severe. Just as the disease is multifactorial in nature, we believe that improving safety will entail multiple approaches. Prevention is essential, but it involves not only access to pediatric dentistry but also the social commitment to help families with few resources and little experience with dentistry or oral health requirements. Innovative approaches to outreach and education will be needed, together with more general efforts to improve access to healthy foods.

Such approaches should be considered as part of a larger effort to understand how systems of care allow adverse events to occur. These include access to timely and affordable dental care and, when early childhood caries occurs, safe dental procedures. How many adverse events must transpire before change occurs?

We do not believe that sedation is performed routinely in a cavalier manner. We believe that many people are invested in the safety of children, care about affected families, and sincerely seek meaningful change. We are glad that your comment has expanded and enriched this discussion and hope that this is the beginning of a dialogue that addresses all facets of this important health problem.

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